



Information Technology Industry Council
Leading Policy for the Innovation Economy

Policy & Regulatory Developments

Electronic Waste Workshop
Commission for Environmental
Cooperation/Border 2012 Program

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Tijuana, Mexico

Information Technology Industry Council (ITI)

- Major U.S. high-tech trade association based in Washington, D.C.
- ITI's Environmental Coalition (EC) represents 65 manufacturers across the entire spectrum of the high-tech and electronics industries



ITI Environmental Coalition

- The EC team works with companies in the following product sectors:
 - Information technology
 - Telecommunications systems and wireless devices
 - Consumer electronics
 - Medical devices
 - Commercial and industrial systems
 - Electronic components



ITI Environmental Coalition

- The EC team leads industry engagement on product-related environmental priorities:
 - Product design and materials content
 - Electronics recycling
 - Energy efficiency
 - Environmental purchasing initiatives
 - Mercury reporting & product labeling
- Advocacy and compliance assistance



Key Companies

1. Apple
2. Agilent
3. Canon
4. Cisco
5. Dell
6. Eastman Kodak
7. Hewlett-Packard
8. IBM
9. Intel
10. Lenovo
11. Lexmark
12. LG Electronics
13. Microsoft
14. Motorola
15. Nokia
16. Panasonic
17. Samsung
18. Sharp
19. Silicon Graphics
20. Sony



Product Design Priorities

- Electronics reuse and recycling is fundamentally linked to product design
- Manufacturers lead the way in design and innovation:
 - Reduce and eliminate substances of concern
 - Improve energy efficiency
 - Increase product functionality
 - Design for maintenance, upgrade and recycling



Industry Commitments

- Go beyond compliance and continuously drive product environmental and energy performance through innovation
- Minimize or eliminate the use of compounds of concern when feasible
- Base design decisions on sound science, product performance and reliability



Industry Achievements

- Through our commitment to continuous improvement, every year our products become more energy efficient, incorporate innovative materials and design advances, and become easier to upgrade, disassemble and recycle.



Industry Achievements

ITI member companies:

- Comply with the European Union Directive on the Restriction of Hazardous Substances (the RoHS Directive)
- Have long-standing design-for-environment or product stewardship programs that often pre-date the adoption of the RoHS Directive



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Compounds of Concern

- Many electronics contain compounds such as lead and mercury because they provide clear and unique benefits:
 - Consumer safety
 - Product performance and reliability
 - Overall energy efficiency
- As our industry has developed viable substitutes, manufacturers have successfully incorporated them into our products



RoHS Exemptions

- Numerous exemptions are granted under the EU RoHS Directive
- Examples include:
 - Lead in CRT glass for consumer safety
 - Mercury backlights for energy efficient illumination
 - Deca-BDE as a flame retardant



Beyond RoHS

- Given the global nature of our industry, RoHS-compliant devices are already available worldwide in most product categories
- Leading companies consider RoHS a floor and have already gone beyond its requirements



Beyond RoHS

- Many companies no longer use compounds even for RoHS-exempted purposes:
 - Substituting other flame retardants for deca-BDE
 - Phasing out the use of mercury backlights in favor of alternate lighting sources as technology allows



Beyond RoHS

- Many companies are reducing or eliminating compounds not subject to RoHS:
 - Phasing out the use of PVC in new products, as safe, acceptable alternatives are identified
 - Phasing out the use of arsenic in glass
 - Constantly investigating other technically feasible, environmentally preferable options that preserve quality, reliability and performance



Additional Design Advances

- Products are designed to be readily maintained and upgraded during their useful lives
 - Facilitates final disassembly
- Products continuously become smaller and lighter (and with more functionality)
 - Saves transport costs during initial distribution and also during final collection



Why Recycle?

- Due to the presence of certain compounds, electronics can and should be appropriately recovered and managed at the end of life
 - Proper management prevents potential risks
- Recycling electronics is far preferable to disposing of them in landfills or incinerators
 - Conserve resources, save energy, reduce demand for new materials



Recycling Challenges

- U.S. Census Bureau data indicate that there are 120 million American households
 - Virtually 100% have at least one television
 - Many/most have computers, cell phones, DVD players, MP3 players, etc.



Recycling Challenges

- The vast majority of consumer IT and electronics products are sold through traditional retail distribution networks
- Manufacturers are often several steps removed from the consumer at the time of initial sale
 - However, many state laws place the sole obligation on manufacturers to collect obsolete products from consumers



Industry Efforts

- Industry went to Congress in 2005 to push for a federal solution
 - Regulatory inconsistency, market disruption, consumer confusion were key concerns
 - State patchwork approaches increase costs without increasing environmental protection
- Resulted in landmark hearings before the U.S. Senate and House



2005 Congressional Testimony

- While manufacturers control product design and innovation, we are only one of several major players involved in product distribution, collection and recycling.
- In addition to manufacturers, other major institutional players include:
 - Distributors
 - Retailers
 - Government
 - Non-governmental organizations (NGOs)
 - Recyclers



2005 Congressional Testimony

“The combined goal of these institutional stakeholders should be to develop a recycling infrastructure that is convenient for the residential consumer.”



Possible Approaches

- Retailers have stores in thousands of communities and are the primary connection between consumers and new products
 - Office Depot and Staples have established permanent recycling programs as part of their customer service commitment
 - Other retailers have not



Industry Efforts

- Involved in ongoing Congressional discussions regarding a federal solution
 - House e-waste Working Group
 - Senator Ron Wyden
- Congressional staff expect to release a concept bill for stakeholder consideration as early as this month



Industry Efforts

- Ensure that used products that our companies recover are properly managed by trained personnel in appropriate facilities
- Provided critical support for US EPA's CRT Rule, which severely restricts exports of end of life CRTs
- Working with US EPA and other stakeholders on certification/best management practices for electronics recyclers



Industry Successes

- Have been involved in the proper recovery and management of well over two billion pounds of used electronics products
- Use significant quantities of recycled materials, including glass, metals and plastics, in new generations of their products
 - Creates markets for recycled materials



Industry Successes

- Manufacturers are involved in numerous recycling efforts:
 - Individual company programs
 - Partnerships with U.S. EPA, state and local governments, retailers, recyclers and charities



Industry Successes

- High-profile companies are measuring themselves (and are being measured) against the triple bottom line: economic, environmental and social:
 - The Global 100 (Most Sustainable Corporations in the World)
 - Dow Jones Sustainability Index
 - FTSE4Good Index (Financial Times Sustainability Index)



Current U.S. Recycling Laws

EXISTING LAWS

- California
- Maine
- Maryland
- Washington

NEW STATUTES

- Minnesota
- Texas
- Oregon
- Connecticut
- North Carolina



Other Potential Jurisdictions

- Michigan
- Massachusetts
- New Mexico
- New York
- New York City
- Pennsylvania
- Rhode Island
- Vermont
- Wisconsin

Others?



Recycling Challenges

- Inefficient Patchwork
 - Lack of consistent scope (i.e, covered products, screen size, exemptions)
 - Varying definitions/interpretations (i.e., portable computer, brand owner)
 - Different metrics (i.e., return share v. market share, ESM program requirements)



Recycling Challenges

- Inefficient Patchwork (continued)
 - Orphan issue
 - CRT Rule/interstate transport issue
 - Numerous inconsistent registration and record-keeping requirements



Conclusions

- While design is the purview of manufacturers, electronics reuse and recycling requires the participation and involvement of all major institutional players, plus citizens.
- Concerted and coordinated action from all players is required to properly and fairly resolve the electronics recycling challenge.



Conclusions

- Regulatory consistency is key to:
 - Ensuring that products are properly reused and recycled
 - Making sure that programs are efficient and cost-effective
 - Preserving market balance
 - Avoiding consumer confusion
 - Providing recycling opportunities to consumers



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